

Remarks

The forgoing amendment and following remarks are in response to the Office Action mailed on October 18, 2006 in which claims 1-22 were rejected. A Request for Continued Examination is enclosed with this Amendment. Claims 5 and 8 are amended and claims 23-41 are canceled without prejudice. Claims 1-22 are pending in this application. In light of the following remarks, the applicant respectfully requests withdrawal of the pending rejections and advancement of this application to allowance.

Restriction Requirement and Canceled Claims

In the Office Action it was requested that non-elected claims 23-41 be canceled. With this Amendment and Response, claims 23-41 are canceled without prejudice. Applicant reserves the right to pursue the non-elected claims in subsequent applications.

The Office Action also requests that Applicant show cause for not previously canceling the non-elected claims. There is no requirement that a patent applicant cancel non-elected claims during prosecution of the elected claims. To advance prosecution of this application, however, applicant has canceled the withdrawn claims without prejudice. Applicant requests withdrawal of the request to show cause.

Rejection Under 35 U.S.C. § 112

In the Office Action claims 5 and 8 were rejected under 35 U.S.C. § 112, second paragraph. Specifically, the phrase “using the semiconductor fabrication process” was rejected as being indefinite. Applicant traverses this rejection. However, in an effort to advance the pending claims toward allowance, Applicant has amended claims 5 and 8 as suggested in the Office Action. Applicant reserves the right to pursue additional claims directed to the original claim language and/or additional semiconductor fabrication processes.

Rejection Under 35 U.S.C. § 103(a)

In the Office Action, claims 1-22 were rejected under 35 U.S.C. §103(a) as being obvious over Isen et al. (U.S. Patent No. 5,763,058). Applicant respectfully traverses this rejection.

The Isen patent is generally directed to a substrate including an electrical circuit component printed directly onto one side of the substrate. (See, for example, title and summary of the Isen patent.) Examples are illustrated in FIG. 8, which shows a substrate layer 53, and electrical circuit components such as a switch SW1, a battery E1, and a capacitor C1. (Col. 11, line 44 – col. 12, lines 25.) The SE electrical circuit components are printed directly onto one side of substrate layer 53. (Col. 11, lines 46-48.) These electrical circuit components, including battery E1, consume space on the side of the substrate, such that additional circuit components cannot be placed at that location. After the electrical circuit has been completed, a protective coating 116 is provided over the top of the finished electrical circuit. (Col. 9, lines 48-51.)

In sharp contrast, the pending application is generally directed to a method of forming a flexible circuit having a battery formed within the circuit board itself. One example is illustrated in FIG. 1, which shows battery 165 formed between layers of circuit board 105.

One of the benefits of having a battery within the circuit board, such as shown in FIG. 1, is that the battery does not take up surface space on the board, leaving more space for the other electrical components and conductors. (Page 7, lines 3-5.) For example, electrical components 150 and 155 can be connected to the circuit board above the battery.

Claim 1 of the pending application recites a method of forming a flexible circuit. The method includes forming a first insulating layer, positioning at least one battery on the first insulating layer, and forming a second insulating layer on the first insulating layer and the at least one battery. The first and second insulating layers form a flexible circuit board.

The Isen patent does not teach, suggest, or disclose a flexible circuit having a battery formed within a flexible circuit board, but rather describes an electrical circuit component printed onto one side of a substrate. Therefore, independent claim 1 is in condition for allowance. Withdrawal of the rejection is requested.

In addition, claims 2-22 depend from claim 1. Accordingly, these claims are also patentably distinct from the Isen patent for at least the same reasons as stated above. Applicant requests withdrawal of the rejection of these claims.

Conclusion

In view of this Amendment and Response, Applicant respectfully requests allowance of the pending claims and advancement of this application to allowance. There may be additional reasons that the subject matter is patentably distinct from the cited references, in addition to those discussed herein. Applicant reserves the right to raise any such arguments in the future.

If the examiner believes a telephone conference would advance the prosecution of the application, the Examiner is invited to telephone the undersigned at the below-listed telephone number.

Respectfully submitted,

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